

Generic ASA

Acrylonitrile Styrene Acrylate
Generic

Message:

This data represents typical values that have been calculated from all products classified as: Generic ASA
This information is provided for comparative purposes only.

General Information			
Physical	Nominal Value	Unit	Test Method
Specific Gravity			
--	1.06 - 1.07	g/cm³	ASTM D792
23°C	1.04 - 1.07	g/cm³	ISO 1183
Melt Mass-Flow Rate (MFR)			
220°C/10.0 kg	2.5 - 18	g/10 min	ASTM D1238
220°C/10.0 kg	3.4 - 26	g/10 min	ISO 1133
Melt Volume-Flow Rate (MVR) (220°C/10.0 kg)	3.80 - 20.1	cm³/10min	ISO 1133
Molding Shrinkage			
Flow: 23°C	0.50 - 0.61	%	ASTM D955
23°C	0.50 - 0.70	%	ISO 294-4
Water Absorption			
23°C, 24 hr	0.25 - 0.35	%	ASTM D570
23°C, 24 hr	0.30	%	ISO 62
Saturated, 23°C	0.50 - 1.7	%	ISO 62
Equilibrium, 23°C, 50% RH	0.19 - 0.37	%	ISO 62
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness			
23°C	85 - 110		ASTM D785
23°C	82 - 114		ISO 2039-2
Ball Indentation Hardness	65.0 - 105	MPa	ISO 2039-1
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus			
23°C	1700 - 2590	MPa	ASTM D638
23°C	1730 - 2720	MPa	ISO 527-2
Tensile Strength			
Yield, 23°C	34.7 - 50.2	MPa	ASTM D638
Yield, 23°C	36.4 - 55.6	MPa	ISO 527-2
Fracture, 23°C	29.9 - 56.8	MPa	ASTM D638
Fracture, 23°C	28.7 - 62.0	MPa	ISO 527-2
23°C	39.7 - 50.9	MPa	ASTM D638
Tensile Elongation			

Yield, 23°C	2.7 - 6.1	%	ASTM D638
Yield, 23°C	2.9 - 6.0	%	ISO 527-2
Fracture, 23°C	14 - 100	%	ASTM D638
Fracture, 23°C	3.0 - 53	%	ISO 527-2
Tensile Creep Modulus (1000 hr)	1250	MPa	ISO 899-1
Flexural Modulus			
23°C	1760 - 2470	MPa	ASTM D790
23°C	1850 - 2930	MPa	ISO 178
Flexural Strength			
23°C	51.4 - 79.0	MPa	ASTM D790
23°C	52.2 - 80.1	MPa	ISO 178
Yield, 23°C	52.9 - 85.0	MPa	ASTM D790
Fracture, 23°C	52.0 - 70.0	MPa	ASTM D790
Films	Nominal Value	Unit	Test Method
Tensile Elongation (Break, 23°C)	8.0 - 12	%	ISO 527-3
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (23°C)	6.5 - 19	kJ/m ²	ISO 179
Charpy Unnotched Impact Strength (23°C)	24 - 100	kJ/m ²	ISO 179
Notched Izod Impact			
23°C	52 - 410	J/m	ASTM D256
23°C	6.5 - 26	kJ/m ²	ISO 180
Instrumented Dart Impact (23°C)	3.72 - 35.7	J	ASTM D3763
Dart Drop Impact (23°C)	24.8 - 25.5	J	ASTM D3029
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			
0.45 MPa, not annealed	86.7 - 107	°C	ASTM D648
0.45 MPa, not annealed	83.9 - 104	°C	ISO 75-2/B
0.45 MPa, annealed	98.8 - 106	°C	ISO 75-2/B
1.8 MPa, not annealed	76.5 - 103	°C	ASTM D648
1.8 MPa, not annealed	74.5 - 97.6	°C	ISO 75-2/A
1.8 MPa, annealed	94.9 - 95.9	°C	ASTM D648
1.8 MPa, annealed	88.0 - 103	°C	ISO 75-2/A
Vicat Softening Temperature			
--	92.0 - 107	°C	ASTM D1525
--	89.6 - 108	°C	ISO 306
Linear thermal expansion coefficient			
Flow	8.5E-5 - 9.0E-5	cm/cm/°C	ASTM D696
Flow	8.4E-5 - 9.0E-5	cm/cm/°C	ASTM E831
Flow	6.9E-5 - 1.0E-4	cm/cm/°C	ISO 11359-2
Lateral	9.2E-5 - 9.6E-5	cm/cm/°C	ASTM E831
Lateral	8.7E-5 - 1.0E-4	cm/cm/°C	ISO 11359-2
Thermal Conductivity (23°C)	0.17	W/m/K	ISO 8302

Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	1.0E+13 - 1.0E+15	ohms	IEC 60093
Volume Resistivity			
23°C	15 - 1.0E+15	ohms·cm	ASTM D257
23°C	7.6E+13 - 1.0E+15	ohms·cm	IEC 60093
Dielectric Strength (23°C)	16 - 18	kV/mm	ASTM D149
Dielectric Constant			
23°C	3.04 - 5.20		ASTM D150
23°C	3.69 - 3.90		IEC 60250
Dissipation Factor			
23°C	0.025 - 0.15		ASTM D150
23°C	9.0E-3 - 0.035		IEC 60250
Comparative Tracking Index	589 - 600	V	IEC 60112
Flammability	Nominal Value	Unit	Test Method
Glow Wire Flammability Index	650 - 751	°C	IEC 60695-2-12
Glow Wire Ignition Temperature	550 - 651	°C	IEC 60695-2-13
Optical	Nominal Value		Test Method
Gardner Gloss	19 - 97		ASTM D523
Injection	Nominal Value	Unit	
Drying Temperature	79.4 - 95.1	°C	
Drying Time	2.9 - 4.0	hr	
Suggested Max Moisture	0.039 - 0.20	%	
Suggested Shot Size	55 - 60	%	
Suggested Max Regrind	18	%	
Rear Temperature	188 - 251	°C	
Middle Temperature	198 - 250	°C	
Front Temperature	225 - 256	°C	
Nozzle Temperature	215 - 261	°C	
Processing (Melt) Temp	215 - 260	°C	
Mold Temperature	60.0 - 60.7	°C	
Injection Pressure	67.8 - 105	MPa	
Back Pressure	0.300 - 10.1	MPa	
Screw Speed	49 - 76	rpm	
Injection instructions			
This data represents typical values that have been calculated from all products classified as: Generic ASA This information is provided for comparative purposes only.			
Extrusion	Nominal Value	Unit	
Drying Temperature	79.9 - 88.1	°C	
Drying Time	2.5 - 4.5	hr	
Suggested Max Moisture	0.010 - 0.051	%	
Cylinder Zone 1 Temp.	180 - 210	°C	
Cylinder Zone 2 Temp.	188 - 224	°C	

Cylinder Zone 3 Temp.	188 - 230	°C
Cylinder Zone 4 Temp.	188 - 235	°C
Cylinder Zone 5 Temp.	188 - 206	°C
Adapter Temperature	204 - 235	°C
Melt Temperature	215 - 245	°C
Die Temperature	200 - 235	°C

Extrusion instructions

This data represents typical values that have been calculated from all products classified as: Generic ASA. This information is provided for comparative purposes only.

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519
Phone: +86 13424755533
Email: sales@su-jiao.com
No. 215, Lianhe North Road, Fengxian District, Shanghai, China

